

ABSTRACT OF THE DISCLOSURE

Activation of PECAM-1 (platelet endothelial cell adhesion molecule-1) with, for example, a small molecule or antibody derivative provides a new therapeutic route for modifying platelet activation and thrombus formation which has utility in the treatment or prevention of cardiovascular diseases such as thrombosis, stroke, and vascular occlusion and in the treatment or prevention of homeostasis disorders. This treatment approach activates a general inhibitory mechanism. A screen for activators of PECAM-1 include PECAM-1, an ectodomain of PECAM-1, the cytoplasmic tail of PECAM-1, the ITIM of PECAM-1, an active site of PECAM-1, a recombinant extracellular domain of PECAM-1, or a part of derivative thereof and ways for detecting activation or cross-linking or phosphorylation or tyrosine phosphorylation of PECAM-1, an ectodomain of PECAM-1, the cytoplasmic tail of PECAM-1, the IPIM of PECAM-1, an active site of PECAM-1, a recombinant extracellular domain of PECAM-1, or a part or derivative thereof.